241 plants, chillies, *jaquz* (a kind of gourd, *Cucumis prophetarum* L.), and lubia. The fruits include limes, bananas, dates, pawpaws and a few grapes and pomegranates.

Speaking of the Meifa district, Heald states that "near the river the main cultivation was the date crops. The sesame did not receive any special cultivation than that given for the millets; the land was ploughed or broken up by the hoe and, after levelling down with a board, the seed was sown in holes at a distance of 18 inches apart; the crop being sown generally in September. The crop was manured with dung or fish, if available, and good results were obtained from liberal manuring; four or five waterings were generally given. The crop was ready for harvest in 3½ months, when the plants were cut down close to the ground and laid out in rows to dry; the plants were then shaken for the seed to fall out on a mat." Speaking of crops generally, Heald says, "All the crops, being from seed bred in and in, had become very poor as one might expect, and unless they import fresh seed from abroad, nothing can prevent the crops from becoming even poorer than they are at present."

Methods of Agriculture.

134 *Soil.*—Mr. Heald's remarks on the land in Asfal al 'Ain apply pretty generally to much of the land in the Hadhramaut. He says, "The soil was of an alluvial nature, and in general very light loam, devoid of humus and requiring heavy manure to produce good yields. The soil in most of the villages in the Meifa valley was alluvial; very thin and with a stony subsoil." In parts of the Wadi Maseila owing to the heavy vegetation there is more humus.

805 241 *Seasons.*—The seasons are arranged by the stars and called Summer (*Seif*), Autumn (*Kharif*), Winter (*Sheita*) and Spring (*Rabia*). From an agricultural point of view it is difficult to distinguish. Crops are often to be seen in all stages, sowing, grown and harvested. According to Heald, the summer crops are Italian and bullrush millet and tobacco, which is sown towards the end of the summer for transplanting in early winter. The winter crops are great millet, maize, lucerne, wheat, barley and all the vegetables.

241 492 ●412 *Implements.*—The implements are few and primitive. A small plough is used for breaking up the surface of the soil. It consists of a sharpened piece of wood with an upright for the farmer to hold and press the "share" into the soil. It is pulled by oxen or a camel. The hoe used has a pear-shaped head; sometimes the soil is levelled after ploughing by dragging a small board over the surface. Small curved knives are used in the tobacco nurseries for scratching up the soil. Heald saw a "weeder" which was very much like a chisel.

241 *Manures.*—Tobacco beds are occasionally treated with sheep dung, but the principal manure in the lower Hadhramaut is fish manure. As many as three small fish are put on the soil round each plant.